### Update & Overview on Recent MATA Activities

"Multi-Attribute Trade-Off Analysis"

in Support of Experimental Planning

Presented by Ted Melis



Workshops - during 2003 – 2004, 3 meetings were held by the TWG with guidance from Ecometric Research (Failing, Korman & Walters) & GCMRC

Objective - to better define "endpoints & attributes" relative to a variety of management treatments as a means of identifying a meaningful long-term experimental design for the AMP

Products - included a "consequence" table that showed relative costs and benefits of the various management treatments, as well as a summary report describing the progress made at the Dec. 2003 Saguaro Lake Ranch workshop (distributed to TWG)



Treatments Considered – ranged from current MLFF to SASF & "PowerMax" options (relaxed hydropower) with various additional treatments - TCD, BHBF and Mechanical Removal

**Best Information** – for resource responses to these treatments was considered and discussed during the Saguaro Lake Ranch workshop – leading to development of the consequence table

Resource Impacts – were evaluated with emphasis on "relative" scores for individual treatments, with an attempt to bound the range from best to worst.



#### Saguaro Lake Ranch Workshop Discussions

"may have provided the most comprehensive assimilation of our understanding of the relationship of dam operations and downstream resources since the conclusion of the EIS"

\*\*\*Construction of the "consequence" table was as much an "end" as it was a "means" to an end - such discussions should be promoted in the future deliberations of the TWG



Ranking & Weighting Exercises – questionnaires about the various proposed management options were filled out by TWG members and the responses were tallied by Lee Failing

Ranking & Weighting Results – indicated that the most preferred experimental management option would include:

a suite of flow and non-flow treatments, including tests of TCD, ongoing Mechanical Removal, increased fluctuating flows and a combination of low and high flows to enhance sand conservation & bar building



<u>Experimental Design Issues</u> – The Dec. 2003 workshop ended with preliminary discussions about strategies for adopting a long-term experimental design that might evaluate the various management treatment options identified through the ranking exercise

Experimental Design Options – potential benefits versus costs for committing to either a "titration" or "factorial" approach to evaluating treatments experimentally was covered by Carl Walters at the Feb. 2004 workshop

<u>Treatments in FY 2005 and beyond</u> – at the end of the Feb. 2004 workshop, the TWG discussed various options for continuing experimental treatments in FY 2004 and beyond



By the end of the Feb. 2004 MATA workshop, those TWG members participating in the process indicated an interest in:

- continuing to use these methods to facilitate experimental planning toward some long-term design & implementation
- having the facilitator provide more detailed documentation of what had occurred at the May and Dec. 2003 workshops, as well as the Feb. 2004 meeting

\*\*\* future MATA activities will require commitment of additional funds from the FY 04 AMP budget

